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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/772,832 | 02/05/2004 | Joseph E. Phillips | CM05200H | 6002 |
| 22917 | 7590 | 05/25/2005 | | EXAMINER |
| MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196 | | | CHANG, RICHARD | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2663 | |

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/772,832 | PHILLIPS ET AL. |
| | Examiner Richard Chang | Art Unit 2663 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 February 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 February 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent application publication No. 2005/0025160 ("Meier et al.").

Regarding claim 1, Meier et al. teach a system and method for grouping multiple VLANs into a single 802.11 IP multicast domain (See Fig. 1) comprising of

at an access point (145),

receiving a multicast packet intended for a VLAN-based broadcast domain (180, particular multicast group),

determining whether there is at least one client (110,115 ..., wireless subscriber unit) belonging to the VLAN-based broadcast domain (180, particular multicast group) and associated with the access point (145), and

rebroadcasting the multicast packet over a wireless segment (140) only if there is at least one wireless client (110,115, subscriber unit) belonging to the VLAN-based broadcast domain (180, particular multicast group) and associated with the access point (145) (See Fig. 1, page 4, section [0054-0056]).

Regarding claim 2, Meier et al. further teach step of rebroadcasting the multicast packet in a VLAN-based broadcast domain (180) over a wired segment (160) (See Fig. 1, page 3, section [0037]).

Regarding claim 3, Meier et al. further teach the processing blocks for computer software execution and decision making, inherently including configuration memory (consulting a storage medium), wherein the configuration memory (storage medium) assigns associated stations to the multicast domain (step 220, comprises a list of wireless subscriber units along with their membership to at least one VLAN multicast domain (multicast group) and whether the wireless client (subscriber unit) is currently associated with the access point) (See Fig. 2, page 4, section [0059] – page 5, section[0060]).

Regarding claim 4, Meier et al. further teach step of configuring (updating) the configuration memory (storage medium) as Access Point intercepting (detecting) internet group multicast protocol (IGMP) reports from the associated 802.11 stations (wireless subscriber units) (See Fig. 1, page 4, section [0045-0046]).

Regarding claim 7, Meier et al. further teach the step of rebroadcasting occurs if there is at least one wireless client (subscriber unit) belonging to the designated multicast VLAN (particular multicast group) and associated with the access point that did not originate the multicast packet (See Fig. 2, page 2, section [0018]).

Regarding claim 8, Meier et al. further teach the step of rebroadcasting the multicast packet over a wireless segment (140) if the multicast packet use a broadcast

group key (signals an automatic rebroadcast of the multicast packet) over the wireless segment (140) (See step 230, Fig. 2, page 4, section [0045]).

Regarding claims 9 and 10, Meier et al. further teach that a multicast or broadcast key ID (a bit or a field) in the multicast packet signals the automatic rebroadcast of the multicast packet (See Fig. 1, page 2, section [0020]).

Regarding claim 11, Meier et al. further teach that the multicast packet is originated from a wireless client (110, ... as wireless subscriber unit) (See Fig. 1, page 3, section [0033]).

Regarding claim 12, Meier et al. further teach that at a wireless client (110, ... as wireless subscriber unit),

setting a '1' in multicast key (first value) within the multicast packet if the wireless client (110, ... as wireless subscriber unit) desires a rebroadcast of the multicast packet, otherwise setting a '0' in multicast key (second value) within the multicast packet (See Fig. 1, page 2, section [0019]), and transmitting the multicast packet (See Fig. 1, page 3, section [0033]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent application publication No. 2005/0025160 ("Meier et al.") in view of US patent No. 6,847,620 ("Meier").

Regarding Claim 6, as discussed above, Meier et al. teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of "the step of updating the storage medium by receiving Inter-Access Point Protocol (IAPP) messages from at least a second access point".

Meier et al. teaches a method of mobile VLAN comprising the step of updating the VLAN database (storage medium) by receiving Inter-Access Point Protocol (IAPP) messages between the old and the new access points (AP1, AP2 at least a second access point) where the wireless subscriber (T1) roams (See Fig. 3, Col. 11, lines 44-65).

A person of ordinary skill in the art would have been motivated to employ Meier in Meier et al. in order to obtain a methods for 802.11 wireless VLAN and to take advantage of updating the VLAN database (storage medium) by receiving Inter-Access Point Protocol (IAPP) messages between the old and the new access points (AP1, AP2 at least a second access point) where the wireless subscriber (T1) roams in claim 5.

The suggestion/motivation to do so would have been to update the VLAN database by receiving IAPP messages between the old and the new access points where the wireless subscriber roams, as suggested by Meier in Fig. 3, Col. 11, lines 44-65. At the time the invention was made, therefore, it would have been obvious to one of

ordinary skill in the art to which the invention pertains to combine Meier with Meier et al. to obtain the inventions specified in claim 5.

Regarding Claim 6, as discussed above, Meier et al. teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of “the step of updating the storage medium by removing an entry from the storage medium based on inactivity from a wireless subscriber unit after a predetermined period of time lapses”.

Meier et al. further teaches a method of mobile VLAN comprising the step of updating the VLAN database (storage medium) by discarding entries in the list (removing an entry from the VLAN database (storage medium)) after some period of inactivity (based on inactivity from a wireless subscriber unit after a predetermined period of time lapses) (See Fig. 3, Col. 15, lines 50-58).

A person of ordinary skill in the art would have been motivated to employ Meier in Meier et al. in order to obtain a method for 802.11 wireless VLAN and to take advantage of updating the VLAN database by discarding entries in the list after some period of inactivity in claim 6.

The suggestion/motivation to do so would have been to update updating the VLAN database by discarding entries in the list after some period of inactivity, as suggested by Meier in Fig. 3, Col. 15, lines 50-58. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Meier with Meier et al. to obtain the inventions specified in claim 6.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RKC
rkc

Richard Chang
Patent Examiner
Art Unit 2663

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER

5/12/05